

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for inhibiting the calcium cascade ~~comprising~~ consisting of administering to an animal in need thereof an effective amount of at least one pharmaceutically acceptable polyvalent metal ion that blocks the calcium cascade.

2. (Original) The method according to claim 1 wherein the metal ions are selected from the group consisting of zinc, copper, magnesium, manganese, iron, and aluminum, and mixtures thereof.

3. (Original) The method according to claim 1 wherein the animal is suffering from an autoimmune disease which causes secretions and eruptions via the Calcium cascade.

4. (Withdrawn) The method according to claim 1 wherein the animal is suffering from rhinitis.

5. (Withdrawn) The method according to claim 1 wherein the animal is suffering from herpes virus infection.

6. (Original) The method according to claim 1 wherein the metal ions are administered through the mouth to the nasal cavity.

7. (Original) The method according to claim 6 wherein the metal ions are in a composition which has a pH of about 4.8 so that the metal ions are delivered across the mucous membranes of the mouth into the nasal cavity.

8. (Original) The method according to claim 7 wherein the composition contains an amino acid as a buffer.

9. (Original) The method according to claim 8 wherein the amino acid is glycine.

10. (Original) The method according to claim 9 wherein the metal ion is zinc.

11. (Original) The method according to claim 10 wherein the metal ions are copper and zinc.

12. (Cancelled)

13. (Withdrawn) A method for inhibiting the formation of histamine by blocking the calcium cascade comprising administering to a patient in need thereof and effective amount of at least one metal ion that blocks the calcium cascade.

14. (New) The method according to claim 1 wherein the metal ion is in a dosage form for delivering a therapeutically effective amount of the metal ion from one anatomical compartment to a contiguous anatomical compartment, said dosage form being designed by the steps of:

- (a) selecting a recipient compartment of the human body for delivery of the metal ion, and selecting a contiguous repository compartment of the human body for placement of the dosage form;
- (b) determining the pH of both the repository and recipient human body compartments;
- (c) selecting a therapeutically effective amount of the metal ion to be used in treatment of the recipient compartment;
- (d) wherein the pH of the repository compartment necessary to allow an effective amount of the drug according to the formula:

$$-pH_{(repository)} = \log[repository] = \frac{NAX}{(T)(2.30R_t)} + \log [recipient]$$

pH=pH of the repository compartment with the dosage form in place,

N=the average Newtonian viscosity of the compartments' fluids,

A=the surface area of the repository compartment,

X=the distance the drug is to travel,

T=the transport time selected,

R=the universal gas constant 1.987 cal/mole-degree or 8.314 joule/mole, and

log is the logarithm of the concentration of drug in

the repository compartment,
log is the logarithm of the concentration of drug in
the recipient compartment,
t=temperature of the body compartment in absolute
degrees--normally 310 degrees Kelvin;
selecting a buffering system that will provide
sufficient buffering effect in the repository
compartment to provide delivery of a therapeutic
amount of the metal ion to the recipient compartment
by producing a pH difference between the repository
and recipient compartments, wherein said buffering
system is capable of sustaining the pH difference in
the repository compartment for a period of time
sufficient for delivery of the metal ion to the
recipient compartment;

- (e) admixing the therapeutically effective amount
of the metal ion together with the components
of the selected buffering system, a
pharmaceutically appropriate base and inert
ingredients, into a desired dosage form.